XRLED 700 Spot

PR-8163

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the projector:

Name	Quantity	Unit	Remark
G clamps	2	Pcs	
XLR cable	1	Pc	with plug and socket
Safety cord	1	Pc	
This manual	1	Pc	
Ω clamps	2	Pcs	Optional

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is 1.3m. 1.3m

Avoid direct exposure to the light from the lamp. The light is harmful to the eye.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.

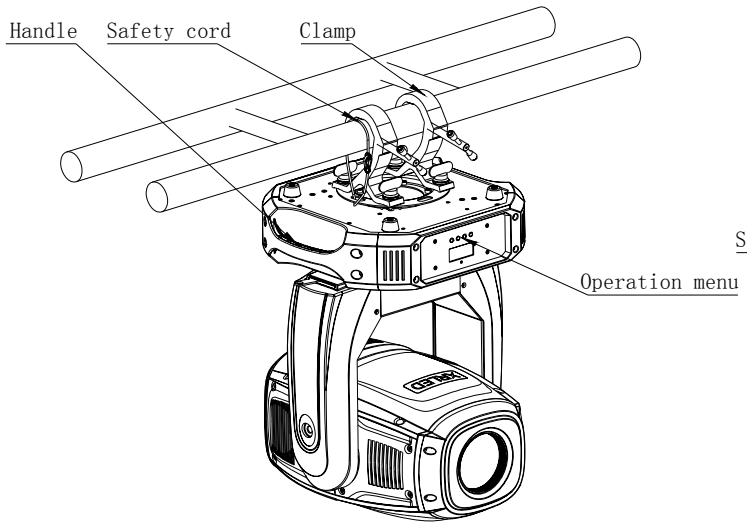
Exterior surface temperatures of the luminaire after 5 minutes operation is 45℃, when steady state is achieved 50℃,

There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

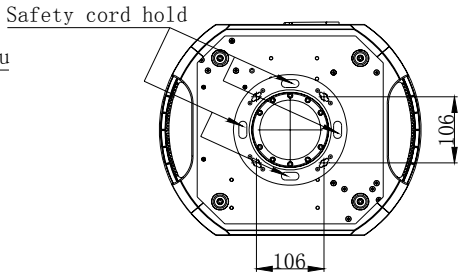
Always disconnection from Power before a device's installation ,cleaning and maintenance !

INSTALL THE PROJECTOR



Warning

Please run the safety cord through a safety cord hole for safety.



Take 2 clamps and the safety cord out from the package and mount 2 clamps on the underside of fixture with 2 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) **To pass SAFETY CORD through 1 HOLE for safety!** Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure that you are going to mount the projector is secure and is strong enough to support a weight of each projector.

WARNING:

1. A device MUST be lifted or carried by its HANDLES instead of clamps.

2. For safety the safety cord should afford 10 times the unit's weight.

POWER SUPPLY-MAINS

Connect the power cord as follows:

L (live) =brown

E (earth) =yellow/green

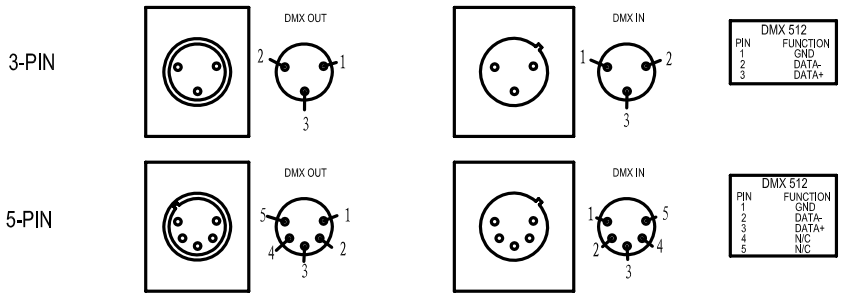
N (neutral) =blue

Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

IMPORTANT

It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.

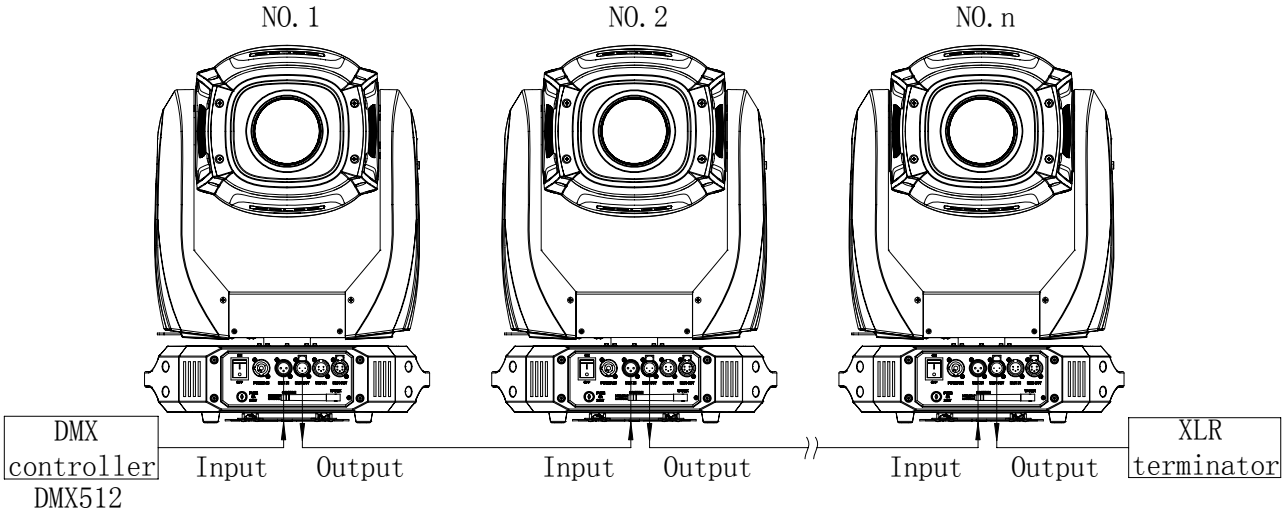
CONTROL CONNECTION



Connection between controller and projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 3 pin XLR plugs and sockets. The XLR's are connected as shown in the figure above.

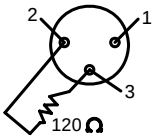
Note: care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The projector accepts digital control signals in protocol DMX512 (1990).

Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.

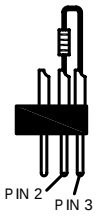


DMX TERMINATOR

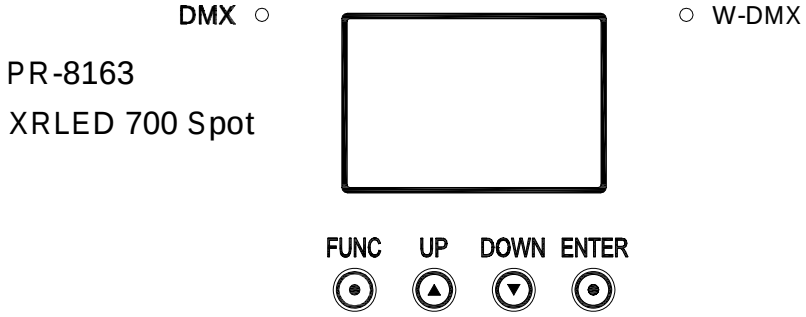
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω(ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



DMX TERMINATOR
CONNECTION
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.



SETUP OPTIONS-PROJECTOR CONFIGURATION



A device configuration can be set conveniently via press button switch and LCD display.
Launch the projector. Press button ENTER more than 5 seconds to unlock panel, LCD display shows functional menus which have their own sub-menus for designated functions, the below is the details
Press button UP or DOWN if you want to browse through the various Setup Options.
Press button ENTER to save your settings or enter the next menu.
Press button UP or DOWN to shift.
Press button FUNC, it will return to the upper menu one by one. If you stay for minutes defaulted will show display status automatically.

TO SET THE DMX START ADDRESS

Each projector must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The fixture have 3 DMX modes. There are standard mode, extended mode and short mode. For example standard mode has 19 channels, so set the No. 1 projector's address 001, No. 2 projector's address 020, No. 3 projector's address 039, No. 4 projector's address 058, and so on.
Launch the projector. Press button ENTER more than 5 seconds to unlock panel.
Press button FUNC to display **DMX address**;
Press button UP and DOWN, you can set the address;
Press button ENTER to confirm, after powered next time, the last saved settings will be showed.
Press button FUNC, it will return to the upper menu one by one.

STAND-ALONE MODE

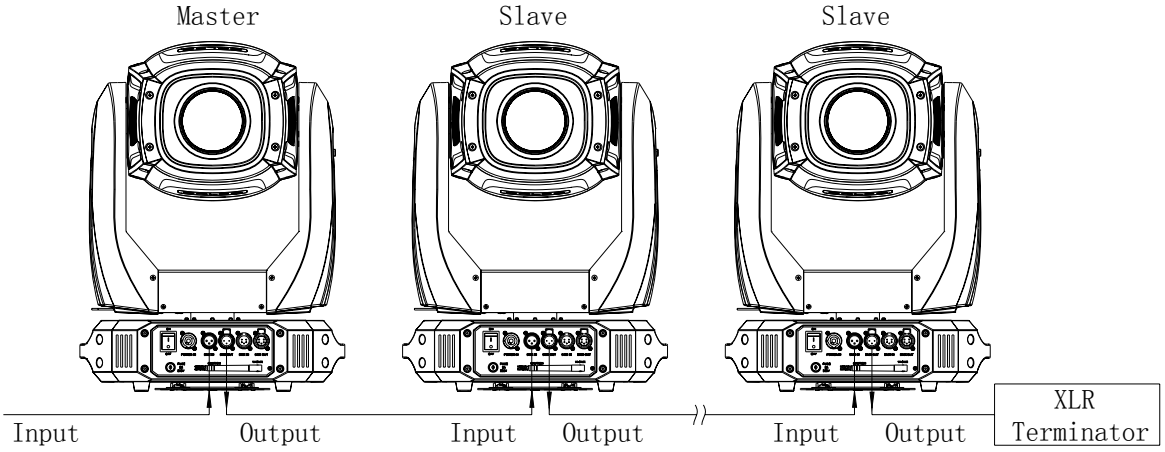
Operate the projector without connecting a controller, enable the master mode in the operation panel, the projector will run in Stand-Alone mode automatically.
DMX address can be set without limitations.

MASTER/SLAVE MODE

Many projectors can run synchronously in the Master/Slave mode by linking them with each other. Select one projector as the master with setting options at any mode of master's modes enabled and make the other projectors as the slaves with setting options slave mode enabled and their DMX start address "001".

Using XLR-XLR cables, Connect the first fixture's output to the second fixture's input, and connect the second fixture's output to the third fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.

After powered, the group will run in synchronous Master/Slave Mode.



OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL
AddR DMX Address	XXX （XXX:1~512）		
Reset	Are You Sure		
CNFG Config Settings	DMX Channel mode (Default is：STD)	Standard 19 STD 19,Maximm Address:494	
		Short 18 Short 15,Maximm Address:498	
		Extended 31 Extended 23,Maximm Address:490	
	Pan Tilt Swap （Default is OFF）	OFF	
		ON	
	Pan Tilt Invert （Default is OFF）	OFF	
		ON	
	Pan Correction	0~127	
	Tilt Correction	0~127	
	DMX Mode (Default is XLR)	XLR First	
		XLR ONLY	
		Wireless Only	
		Wireless First	
		Wireless to XLR	
	Unlink Wireless	Yes	
	Master/Slave Options （Default is slave）	Slave	
		Master	
	Restore ex-factory Defaults	yES	
	parameters Transmission	yES	
	Display Options	Language	English/Chinese
		Display Mode	Off after delay/ Always on
		Display Invert	OFF/ON
		Display Contrast	0~18
INFO (Information)	Power-on Time	XXXX	
	Software version	X.X.X	

TEST Test Mode	Auto- Test	Yes	
	Manual Test	LED	NO
			OFF
		Colour Wheel	White
			Colour 1 ～ Colour 6
			Rotation
			Stop rotating
			Reverse Rotation
		Iris	NO
			Effect 1
			Effect 2
			Effect 3
		F-Gobo wheel	NO Gobo
			Gobo 1 ～ Gobo 7
			Rotation
			Reverse Rotation
			Shake 1 ～ 6
		Rotating Gobo	NO Gobo
			Gobo 1 ～ Gobo 7
			Rotation
			Reverse Rotation
			Shake 1 ~ 6
		Gobo rotation	Stop rotating
			Rotation
			Reverse Rotation
		Lambency	No
			Have
		Prism Set	NO
			Have

		Prism Rotate	Stop
			Rotation
			Reverse Rotation
		Focus	0-255
		ZOOM	0-255
		Pan Location	0-255
		Tilt Location	0-255
		Pan&Tilt Speed	0-255
mENU Operation Mode	DMX Operation		
	Preset Memory		
	User Memory		
	Static Scene from 1～16	CH1 Strobe	0-255
		CH2 Dimmer	0-255
		CH3 Colour wheel	0-255
		CH4 Iris	0-255
		CH5 F-Gobo wheel	0-255
		CH6 R-Gobo	0-255
		CH7 Gobo-R	0-255
		CH8 Lambency	0-255
		CH9 Prism Set	0-255
		CH10 Prism Rotate	0-255
		CH11 Focus	0-255
		CH12 Zoom	0-255
		CH13 PanLocation	0-255
		CH14 TiltLocation	0-255
		CH15 P&T Speed	0-255
		CH16 Keep Time	0-25 Second

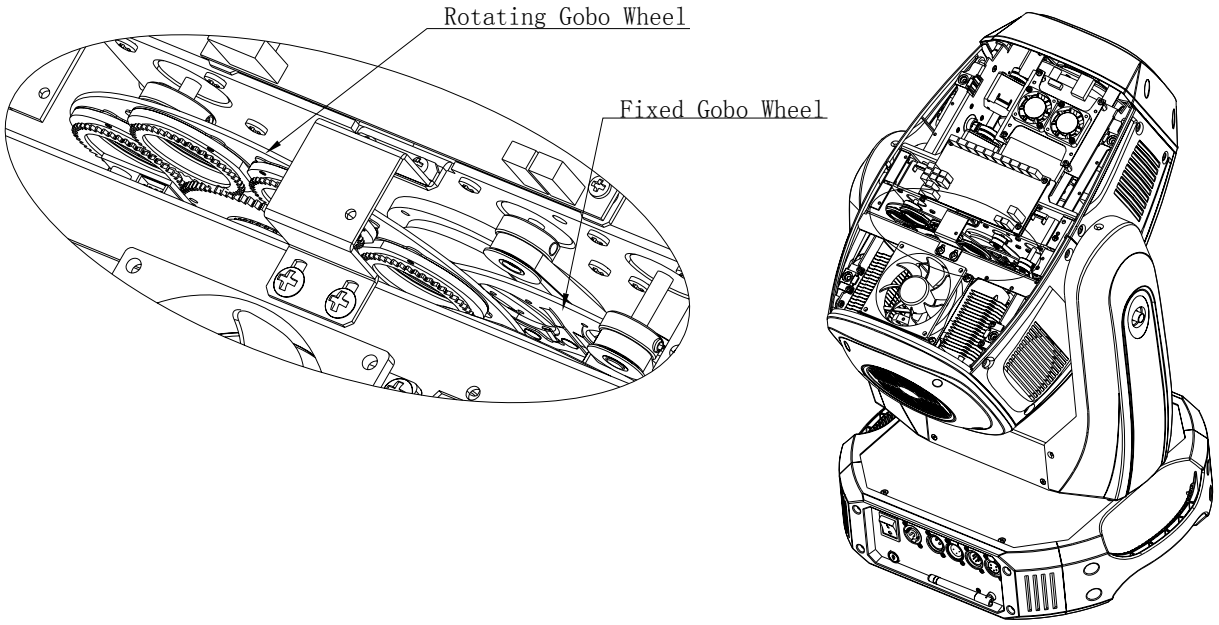
Remark:

1. In the synchronous control of multiple projectors parameters can be transmitted from the master including: DMX mode, display setting, operation mode(user memory data included);

2. All projectors Accepting parameters will automatically be set to slave mode.

Explanations for the logos on top-right of the display
S: Slave M: Master
D: DMX 512 I: Preset Memory
U: User's Memory T: Test Mode
Lock Logo: all buttons are locked, press "ENTER" button for more than 5 seconds till lock logo disappears and buttons are unlocked.

REPLACING GOBOS



Disconnect the fixture from power. Carefully lift off the cover by undoing the 4 fast-fit screws.

Before the replacement of fixed gobos, take leaf spring out using finger, push the gobos out carefully and insert new gobos.

For rotating gobos: take rotating gobo wheel out by hand, push gobos out after pulling out leaf springs. Insert new gobos into gobo holders, then insert leaf spring back and make sure it is in narrow ring groove in the holder, i.e. internal ring groove in the holder, then flatten it. At last, use appropriate tool to push tightening spring back, then put the holder back into the wheel by another hand.

Note: If the gobo is a glass one, it should be touched with glabrous, clean and soft tissue or cloth matted between hand and glass instead of with bare hand.

Close the rear cover and fasten 4 fast-fit screws.

DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION
1	1	1	Strobe	000-015	No Strobe
				016-127	Pulse Effect
				128-255	Strobe speed from slow to fast
2	2	2	Dimmer	000-255	Dimming from dark to light (0-100%)
		3	Dimmer Fine	000-255	Dimmer in 16 Bit precision
3	3	4	Color Wheel	000-031	White
				032-047	Cyan
				048-063	Magenta
				064-079	Blue

				080-095	Red
				096-111	Green
				112-127	Yellow
				128-159	Forward Rotation(Speed From Slow to Fast)
				160-223	White
				224-255	Reverse Rotation(Speed From Slow to Fast)
4	4	5	Iris	000-207	From big to Small
				208-223	Iris effect 1
				224-239	Iris effect 2
				240-255	Iris effect 3
		6	Iris Fine	0-255	Iris in 16 Bit precision
5	5	7	Fixed Gobo Wheel	000-015	White
				016-031	Gobo1
				032-047	Gobo 2
				048-063	Gobo 3
				064-079	Gobo 4
				080-095	Gobo 5
				096-111	Gobo 6
				112-127	Gobo 7
				128-143	Rotation from slow to fast
				144-159	Reverse rotation from slow to fast
				160-175	Gobo shake 1 from fast to slow
				176-191	Gobo shake 2 from fast to slow
				192-207	Gobo shake 3 from fast to slow
				208-223	Gobo shake 4 from fast to slow
				224-239	Gobo shake 5 from fast to slow
				240-255	Gobo shake 6 from fast to slow
6	6	8	Rotating Gobo Wheel	000-015	No **Gobo**
				016-031	Gobo1
				032-047	Gobo 2
				048-063	Gobo 3
				064-079	Gobo 4
				080-095	Gobo 5
				096-111	Gobo 6
				112-127	Gobo 7

				128-143	Rotation speed from slow to fast
				144-159	Reverse rotation from slow to fast
				160-175	Gobo shake 1 from fast to slow
				176-191	Gobo shake 2 from fast to slow
				192-207	Gobo shake 3 from fast to slow
				208-223	Gobo shake 4 from fast to slow
				224-239	Gobo shake 5 from fast to slow
				240-255	Gobo shake 6 from fast to slow
7	7	9	Gobo rotation	000-207	0~540°indexable
				208-223	Gobo rotation from slow to fast
				224-239	Stop rotating
				240-255	Reverse rotation from slow to fast
	8	10	Gobo rotation Fine	000-255	Gobo rotation in 16 Bit precision
8	9	11	Frost Filter	000-019	No
				020-255	Frost Effect
9	10	12	Prism	000-019	White
				020-255	Prism
10	11	13	Prism rotation	000-063	Stop rotating
				064-127	Prism rotation from slow to fast
				128-191	Stop rotating
				192-255	Reverse rotation from slow to fast
11	12	14	Focus	000-255	Linearly focusing
		15	Focus Fine	000-255	Focus in 16 precision
12	13	16	Zoom	000-255	Linearly focusing
		17	Zoom Fine	000-255	Focus in 16 precision
13	14	18	Pan	000-255	Pan rotation 0°~ 540°
	15	19	Pan Fine	000-255	Pan rotation in 16 precision
14	16	20	Tilt	000-255	Tilt rotation 0°~270°
	17	21	Tilt Fine	000-255	Tilt rotation in 16 precision
	18	22	Pan & Tilt speed	000-255	Pan &Tilt speed from fast to slow
15	19	23	Control	000-048	Reserved
				049-255	Reset

Note:

****While prior Channel is used, lower channel is invalid

INDICATION OF LCD Display

Green LED indication	On	DMX signal OK
	Off	No DMX signal
Blue LED indication	On	Linked with Wireless Transmitter
	Off	Not linked with transmitter
	Flash	Being linked with a transmitter or losing link

MAINTENANCE

If the projector does not function, check the fuses on the power socket of the projector, they should only be replaced by fuses of the same specification. Should these be damaged call a qualified technician before replacement. The projector has thermal protection device that will switch off the projector in case of overheating, should either of these operate, check that the fans are not blocked, and if they are dirty clean them before switching on the projector again. Check that the fans are operational, if not call a qualified technician.

Any maintenance work should only be carried out by qualified technicians.

LUBRICATION

To ensure the continuous rotation of the rotating gobos and linear motion of the lens for focusing, it is recommended that the bearings for the rotating gobos and the 2 shafts for the focusing lens holder be lubricated periodically, preferably every two months. Use only high quality, high-temperature resistant grease instead of any type of oil. When lubricating
the bearings, a syringe with a fine needle is the easiest way to introduce the grease to the bearings around each gobo.

KEEPING THE PROJECTOR CLEAN

To ensure the reliability of the projector it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output. **Do NOT use any type of solvent on dichroic colour filters.**

Cleaning frequency depends on the environment in which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days and clean the internal optics at least once every 30 / 60 days.

Do not use any organic solvent, e.g. alcohol, to clean the reflector mirror, dichroic colour filters or housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn't switch on	Check the fuse on the power socket. Replace the lamp.
The lamp comes on but the projector doesn't respond to the controller	Make sure that the projector is correctly configurated. Replace or repair the DMX cable.
The projector only functions intermittently	Make sure the fan is working and not dirty.
Defective projection	Check the lenses are not broken. Remove dust or grease from the lenses.
The project image appears to have a halo	Make sure the lamp is installed correctly. Carefully clean the optical group lenses and the projector components.
The beam appears dim	Check the optics is clean. Replace with a new lamp of the specified type and rating.

TECHNICAL DATA

VOLTAGES:

100V~240V AC，50/60Hz

POWER CONSUMPTION:

400W@220V

COLOURS:

6 colors +open color wheel

With variable speed bi-directional rainbow effect

Color Temperature

8000K±500K

GOBOS:

1 Rotating gobo wheel:

7 interchangeable gobos+ white, glass or metal gobos can be fixed

Indexable, bi-directionally rotatable and Wheel Scrolling at variable speeds, shakable at variable speeds

1 Fixed gobo wheel :

7 interchangeable gobos+ white

bi-directional wheel scrolling at variable speeds, shaking at variable speeds

Gobo diameter: Φ27.8mm

Gobo image diameter: Φ23mm

PRISM

1x3 facet prism, bi-directionally rotatable at variable speeds

Iris

Linearly adjusted with Macros

FOCUS:

linearly focusing controlled by DMX

DIMMER:

0-100% linearly adjustable

Strobe:

Electronic strobe, 0.3~20 F.P.S

HEAD MOVEMENT:

Pan 0 º ~540º, Tilt 0 º ~270º with auto position correction

Swap and Invert functions of Pan and Tilt

BEAM ANGLE:

12°～36°linear adjustment

CONTROL:

DMX512, 3 pin, 5 pin interfaces
15channels in short mode,19 channels in standard mode, and 23 channels in extended mode.
Master/slave mode
Stand-alone mode
Self-test mode

OTHER FUNCTIONS:

Adjustable Pan & Tilt speed
Fixture usage time display
Software version display
DMX512 wireless available
Optional DMX512 wireless remitter

HOUSING:

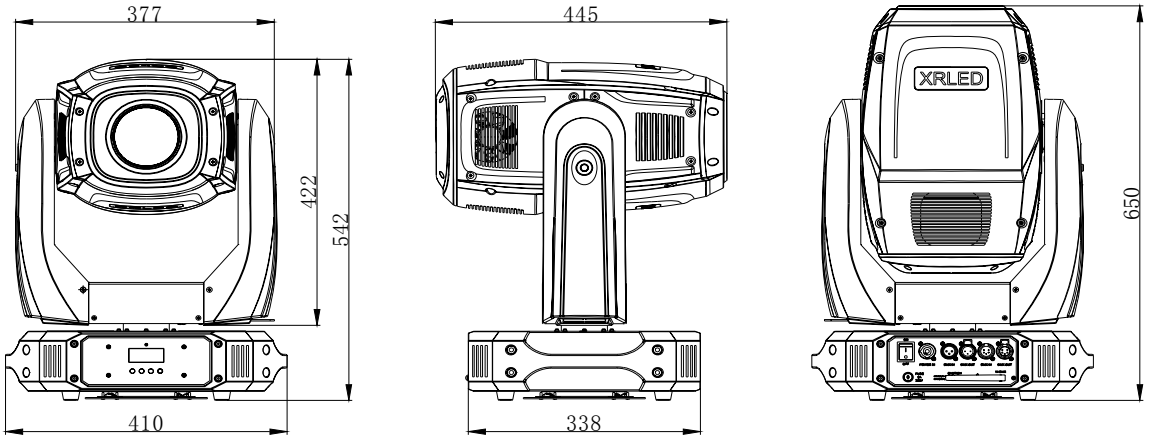
Composite plastic, IP20

WEIGHT:

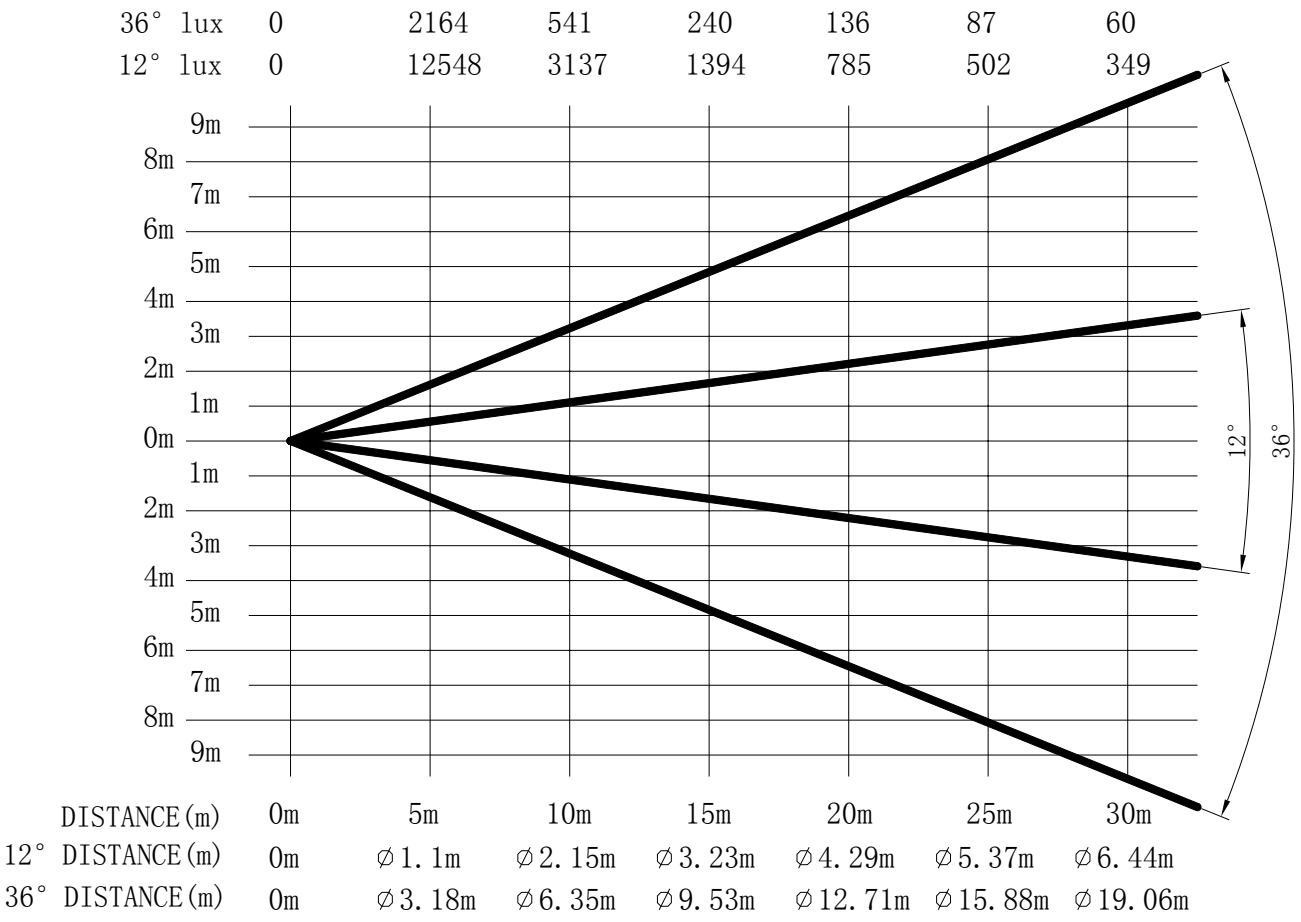
24Kg

SIZES:

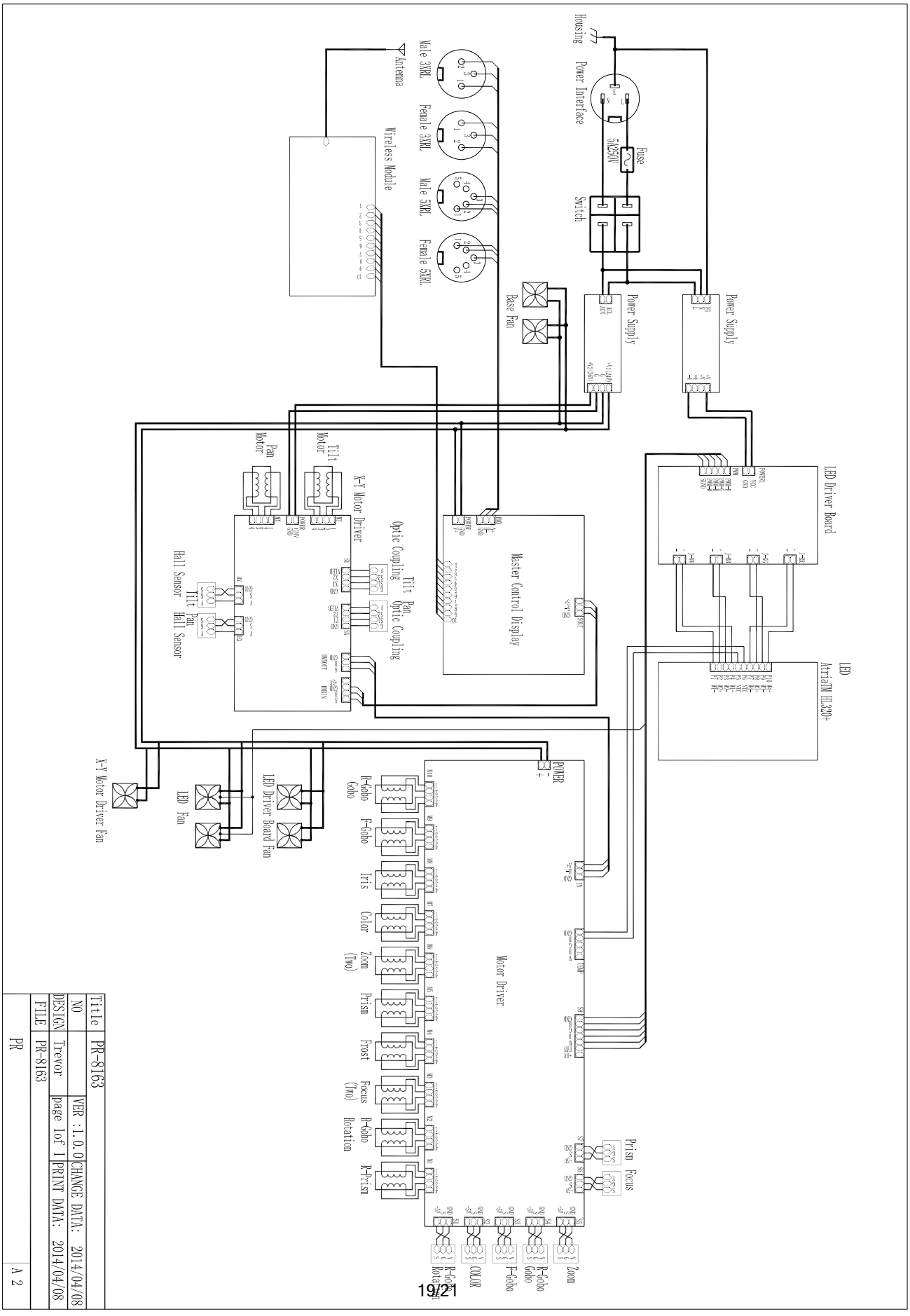
See at below



LIGHT OUTPUT:


36° lux 0 2164 541 240 136 87 60
12° lux 0 12548 3137 1394 785 502 349
9m
8m
7m
6m
5m
4m
3m
2m
1m
0m
1m
2m
3m
4m
5m
6m
7m
8m
9m
12°
36°
DISTANCE(m) 0m 5m 10m 15m 20m 25m 30m
12° DISTANCE(m) 0m ∅1.1m ∅2.15m ∅3.23m ∅4.29m ∅5.37m ∅6.44m
36° DISTANCE(m) 0m ∅3.18m ∅6.35m ∅9.53m ∅12.71m ∅15.88m ∅19.06m

ELECTRICAL DIAGRAM



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COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
400W POWER SUPPLY	192010153	1	
230W POWER SUPPLY	192010156	1	
LED WHITE LIGHT SOURCE	250020279	1	
6.3A FUSE	270041045	1	5X20 6.3A、250V
TILT BELT	290151378	1	HTD-684-3M
PAN BELT	290151374	1	HTD-447-3M
TAIL FAN	030060074	2	92X92X25
BASE FAN	030060080	2	60X60X20
PAN MOTOR	030040190	1	
TILT MOTOR		1	
IRIS MOTOR	030040215	1	
ROTATING GOBO WHEEL MOTOR		1	
PRISM ROTATION MOTOR		1	
PRISM MODULE MOTOR	030040230	1	
COLOR WHEEL MOTOR	030040155	1	
GOBO ROTATION MOTOR	030040166	1	
FOCUS MOTOR	030040154	2	
ZOOM MOTOR		2	
FIXED GOBO WHEEL MOTOR	030040213	1	
FROST FILTER MOTOR	030040210	1	
CONSTANT CURRENT SUPPLY	230060314	1	
PAN/TILT DRIVE PCB	230060333	1	
MOTOR DRIVER PCB	230060311	1	
LCD DISPLAY PCB	230060320	1	

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